



**IOWA DEPARTMENT OF NATURAL RESOURCES**

**Sept. 6, 2007**

**For immediate release**

- 1. Lab results indicate pesticide at fault in Shelby County Fish Kill**
- 2. Iowa air monitors record multiple exceedances of health standards**

## **LAB RESULTS INDICATE PESTICIDE AT FAULT IN SHELBY COUNTY FISH KILL**

**MEDIA CONTACT: Alison Manz or Dan Stipe at (712) 243-1934.**

HARLAN –Test results indicate that a pesticide was the cause of a fish kill that occurred Aug. 15 at Little Lake George in Harlan.

Water samples collected from this lake during the investigation show levels of chlorpyrifos, an insecticide, at approximately 50 times the toxic level for aquatic life. In four water samples taken at different locations, the concentrations were 4.6, 4.3, 3.2 and 0.62 parts per billion. Chlorpyrifos is toxic to fish and other aquatic life at a concentration of 0.083 ppb.

Marketed for agricultural and household use, this pesticide is used to control insect pests on row crops and golf courses. It's also used as a wood treatment and to kill mosquitoes. Tradenames for chlorpyrifos include Brodan, Detmol UA, Dowco 179, Dursban, Empire, Eradex, Lorsban, Paequant, Piridane, Scout and Stipend. It's also sold under a number of generic names.

Chemical residues in drinking water or food are not a concern, but are extremely toxic to fish and to the aquatic insects like dragonfly larvae that fish feed upon.

The DNR is continuing to investigate several potential sources of the chemical that caused the fish kill.

“It’s also uncertain how the chemical reached the lake, although several possibilities are under investigation,” said Alison Manz, an environmental specialist at the Atlantic DNR field office. “This just highlights how important it is for people to store and apply hazardous chemicals correctly to prevent them from reaching storm sewers or other waterways.

If they are applying lawn or crop chemicals, it’s vital that they follow the instructions on the pesticide label, she said.

“Many people don’t realize that when they pour something down a storm drain on their city street, it goes straight to a nearby stream or lake,” Manz added.

It doesn’t hurt to leave a buffer of grass around crop fields, watch weather conditions and avoid applying chemicals before a storm.

Levels of several herbicides were somewhat elevated in the lake, including atrazine, metolachlor and acetochlor. But they have been ruled out as a cause of the fish kill.

The DNR’s water monitoring and fisheries bureaus are considering ongoing monitoring to ensure that chemical levels have dropped.

A DNR fisheries survey on Aug. 31 following the kill found two live bass but no crappie or bluegill.

“Although the kill is believed to have been caused by chlorpyrifos, the fish remaining in the lake should be safe to eat,” said John Olson, water quality specialist with the DNR.

“Chlorpyrifos breaks down relatively rapidly in the environment,” he added. “And, based on toxicology reports for chlorpyrifos, the presence of this chemical in Little Lake George should not present a risk or threat to the health of those who eat fish from this lake.”

The kill claimed an estimated 922 fish, including 710 crappie, 198 bluegill, seven bullheads and seven green sunfish.

*Writer: Karen Grimes*

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## **IOWA AIR MONITORS RECORD MULTIPLE EXCEEDANCES OF HEALTH STANDARDS**

**MEDIA CONTACT: Mindy Kralicek (515) 281-7832, or Sean Fitzsimmons (515) 281-8923.**

The Iowa Department of Natural Resources Air Quality Bureau reported its monitors recorded exceedances of National Ambient Air Quality Standards (NAAQS) for pollutants 19 times from Jan. 1 through July 31, 2007. NAAQS are set by the Environmental Protection Agency (EPA) for seven pollutants considered harmful to public health and the environment.

The most common culprit was fine particulate matter (PM<sub>2.5</sub>). Exceedances of EPA's PM<sub>2.5</sub> standard were monitored in Muscatine seven times; Clinton three times; Davenport three times, and in Council Bluffs, Sioux City and Iowa City each one time. For the pollutant levels recorded, EPA indicates that individuals with respiratory or heart disease as well as the elderly and children are the groups most at risk, with increasing likelihood of respiratory symptoms in sensitive individuals, aggravation of heart or lung disease and premature mortality in persons with cardiopulmonary disease and the elderly.

High levels of fine particles usually occur under meteorological conditions where air is stagnant over a multi-state region, trapping direct fine particle emissions from combustion sources. More fine particles are added when common airborne pollutants react with sunlight.

The ozone standard was exceeded one time each in Waverly (north of Waterloo) and Pisgah (north of Council Bluffs). The standard for coarse particulate matter or PM<sub>10</sub> (particulate matter less than 10 microns in diameter) was exceeded once in Mason City.

The full report can be accessed at [www.iowadnr.com/air/prof/monitor/monitor.html](http://www.iowadnr.com/air/prof/monitor/monitor.html).

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